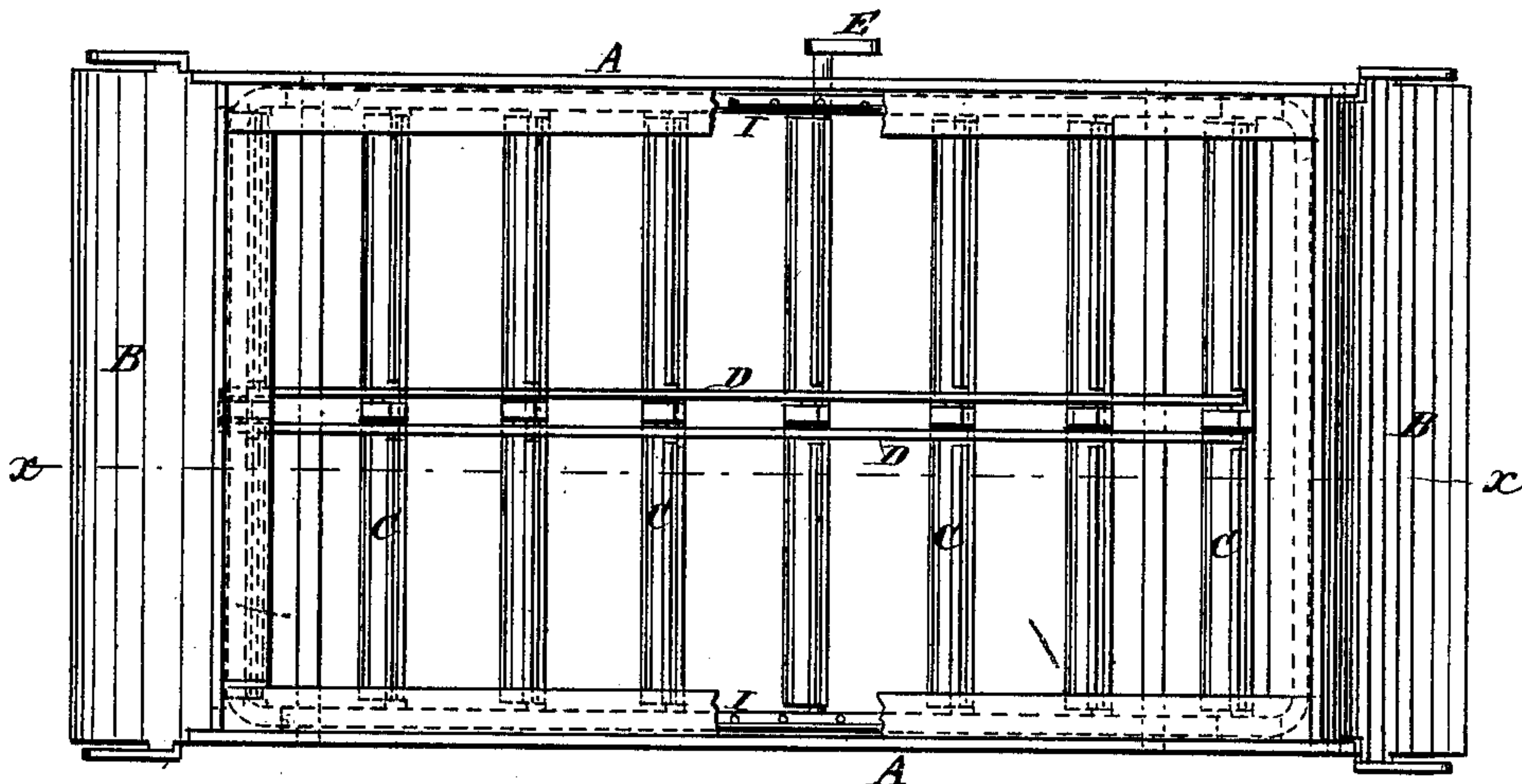


J. B. HARRISON.  
Ash-Pan for Locomotives.

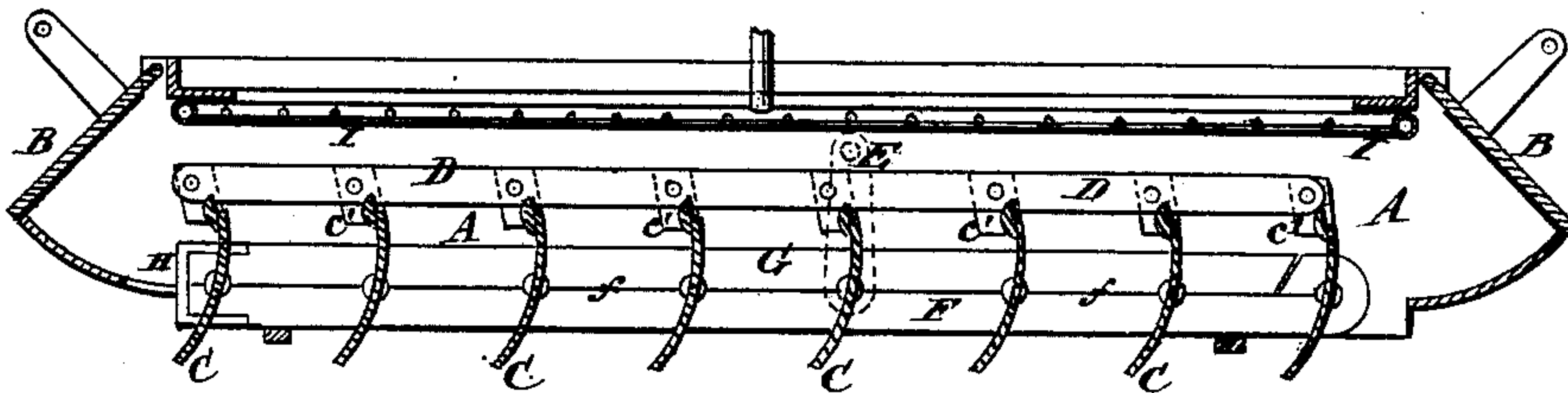
No. 200,910.

Patented March 5, 1878.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*E. Wolff.*  
*J. H. Scarborough.*

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# UNITED STATES PATENT OFFICE.

JOHN B. HARRISON, OF CINCINNATI, OHIO.

## IMPROVEMENT IN ASH-PANS FOR LOCOMOTIVES.

Specification forming part of Letters Patent No. 200,910, dated March 5, 1878; application filed October 20, 1877.

*To all whom it may concern:*

Be it known that I, JOHN B. HARRISON, of Cincinnati, Hamilton county, and State of Ohio, have invented a new and Improved Ash-Pan for Locomotives, of which the following is a specification:

The object of my invention is to provide a convenient means of dumping the cinders and ashes from the fire-place of a locomotive onto the track, for ballasting purposes; also, of facilitating the cleaning of the fire, to prevent the choking up of the draft and burning of grate-bars, and of instantaneous extinction of the fire when the pumps fail to work and the water gets too low in the boiler, or for other purposes.

The invention consists in forming the bottom of an ash-pan out of a series of slats, pivoted at their ends and connected together, to be operated for closing and opening by a rod, in the fashion of Venetian blinds, and in combination therewith of a water-pipe connected with the pump.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the accompanying drawings, Figure 1 is a top view of my improved ash-pan, suitable for a locomotive fire-box. Fig. 2 is a section of the same, taken on line *xx* in Fig. 1.

Similar letters of reference indicate corresponding parts.

A A are the sides of the ash-pan. B B are the usual front and rear dampers. C are the slats forming the bottom of the ash-pan. These are provided with pivots at their ends, which work in holes or bearings on the inside of the ash-pan, and are connected together by a rod or rods, D, pivoted to lugs C', of which one is attached to each slat C, so that by moving the rod the slats will oscillate on their pivots, and be made to open and close in the manner of an ordinary window-blind. One of the pivots of the slats C extends through the side A, and

is provided outside the ash-pan with a lever or crank, E, for operating the slats. The pivots of the slats C are centered upon the junction-lines *f* of the movable bars G and the stationary bars F, the latter being formed upon or attached one to each side A, and supporting the pivots, while the former, G, serve as journal-cups, common to them all. The bar G is held in position on the bar F by the bracket H, inserted to clamp their ends, as seen in Fig. 2.

By removing the bracket H and the bar G the slats C may be taken out in a very short time when repairs are needed, either of the ash-pan or of the grate-bars above.

I is a perforated water-pipe surrounding the inside of the ash-pan, and connected with the water-supply pump of the engine.

By turning on the water from the pipe I the ashes and cinders may be cooled before dropped on the track; and, when occasion requires, the fire may be quickly put out by being dumped off the fire-grate into the ash-pan, and then sprinkled with water from the pipe I. The fire thus being extinguished, its contents are dumped on the track by opening the slats C wherever required, and without danger of causing destruction by fire.

The slats C are made concave on their upper surface, as seen in the drawing, in order to retain enough water from the pipe I to keep them from warping by the heat.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, in a locomotive ash-pan, of the slats C, concaved on upper surface, and the water-supply pipes or nozzles I, substantially as shown and described, for the purpose specified.

JOHN B. HARRISON.

Witnesses:

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P. I. HARRISON.